

## ABSTRACT

The invention relates to the use of a compound that transitorily depletes or inhibits B lymphocytes in the preparation of a composition for being administered to a patient in order to augment the specific T cell response to a vaccine, in particular a therapeutic vaccine, against a tumor or a chronic infection by a virus, a parasite or some other microorganism. In a particular use the composition is to be administered to a patient in order to augment the specific T cell response to a vaccine, in particular a therapeutic vaccine, comprising at least one inactivated human immunodeficiency virus (HIV). In particular, the depleting compound is an antibody, advantageously monoclonal, directed against transmembrane antigen CD20 of pre-B or mature B lymphocytes.